

EXHIBIT C



1

[REDACTED]

XII. Technical Analyses Relating to Damages

A. SSPPU

1266. In this section I discuss my findings on the smallest salable unit for the accused products for the asserted claims. As discussed in my infringement analysis, which I rely upon here, infringement requires more than the single “system on a chip” component, including memory and other components.

1267. I have also considered the individual elements on the [REDACTED] of the accused products to determine what a hypothetical smallest salable unit of the populated main board could be. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1268. Generally, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

COMMSCOPE04654; COMMSCOPE04672; COMMSCOPE04690; COMMSCOPE046717;
COMMSCOPE046725; COMMSCOPE046733; COMMSCOPE046740; COMMSCOPE046761;
COMMSCOPE046782; COMMSCOPE046805; COMMSCOPE046806; COMMSCOPE046831;
COMMSCOPE046832; COMMSCOPE046833; COMMSCOPE046873; COMMSCOPE046914;
COMMSCOPE046918; COMMSCOPE046922; COMMSCOPE049770; COMMSCOPE049771;
COMMSCOPE049772, COMMSCOPE049798); [REDACTED] (COMMSCOPE049469);
COMMSCOPE048569 [REDACTED] NVG599. See, e.g.,
COMMSCOPE038762 [REDACTED] COMMSCOPE038978
[REDACTED] COMMSCOPE038983 [REDACTED]
COMMSCOPE039010 [REDACTED] COMMSCOPE038988 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1269. Generally, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

B. Noninfringing Alternatives

1270. I understand that the framework for calculating a reasonable royalty considers a hypothetical negotiation between the parties which asks what the parties would have agreed had they successfully negotiated an agreement just before infringement began. I also understand that the existence of non-infringing alternatives may be relevant to the hypothetical negotiation. I understand that, in order to rely on a non-infringing alternative for a value assessment, it is necessary to show that such alternative was both available and acceptable. In the standards setting context, I understand that an alternative is available and acceptable if it is a commercially and technically feasible way to implement the standard at the time of the standard's approval.

1271. I understand that, in response to TQD's interrogatories, [REDACTED]

[REDACTED]

[REDACTED] It is my understanding that this issue does not relate to validity of any asserted patents or their infringement. Instead, it is my understanding that this analysis potentially bears on damages. I reserve the right to supplement my opinions with regard to either Nokia or CommScope on non-infringing alternatives, including to the extent that Nokia or CommScope use experts to opine on

[REDACTED]

these topics. In my opinion, neither CommScope nor Nokia has identified a non-infringing alternative (known as an “NIA”) that would have been or is acceptable.

1272. Several of the alternatives are directed to TQ Delta patents that I have found to be essential to one or more DSL standards. I do not consider alternatives to patents essential to a DSL standard to be acceptable, as the modified product would then either be noncompliant with the standard or the standard would need to be changed to accept the alternative, requiring considerable work and disabling the products, or entire features of products, produced under the current standard. One of the greatest considerations of standards is that they provide interoperability between devices made by different manufacturers. If the SEP is not practiced, the device would not interoperate at all, or would not interoperate to provide a particular feature, with devices made by other manufacturers that were standard compliant.

1273. My general understanding is that during the DSL standards development process, the expert members of the DSL standards groups evaluate many solutions and select the solution they consider the best. Therefore, as part of the standards process, other alternatives are considered but rejected as being inferior to the chosen solution.

1274. There is mix of patents that are standards-essential patents and non-standard essential patents at-issue in this case. The Family 3 and 9A Patent claims asserted against Nokia and CommScope are not standard essential patents (as I use that term below) because, while the relevant standards show that many limitations are met, the claims have additional elements that are not expressly called for by the VDSL2 standards (Family 3) and G.inp standards (Family 9A), including the use of a “shared memory.” The Family 2 Patent claims asserted against Nokia are also, in my opinion, not standard essential patents as I use that term below. While the bonding standards show that a number of claim elements are met, the claims include additional limitations

[REDACTED]

regarding bonding configurations that are not expressly called for by the bonding standards (such as the use of multiple transceivers, a plurality in bonded mode and at least one in native mode). The Family 2 Patent claims asserted against CommScope, however, are standard essential patents.

1275. The remaining patents are, in my opinion, standard-essential: the Family 1 Patent asserted against both Nokia and CommScope is essential to the identified functionality in VDSL2; the Family 2 Patent asserted against CommScope is essential to the identified functionality in the PTM bonding standards; the Family 4 Patent asserted against CommScope and Nokia is essential to the identified functionality in VDSL2; the Family 6 Patents asserted against CommScope and Nokia is essential to the identified functionality in VDSL2; the Family 9B Patents asserted against CommScope and Nokia is essential to the identified functionality in G.inp; and the Family 10 Patents asserted against CommScope and Nokia is essential to the identified functionality in VDSL and G.inp.

1276. I understand that both [REDACTED] that, as I understand it, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1277. My understanding [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1278. Generally, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1279. Nokia [REDACTED]

[REDACTED]



I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: August 29, 2022

A handwritten signature in black ink, appearing to read 'T Cooklev', with a long horizontal stroke extending to the right.

Todor Cooklev, PhD.